



WATER-RIGHT DOCKET

Natchez Trace Parkway

Docket No: 5

CHEROKEE DEVELOPMENT WATER SYSTEM

Supporting Hydro Data

03-22-1966: letter to regional director, southeast region from hydraulic engineer regarding the results of a ground-water study made



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division
P.O. Box V
University, Alabama 35486

IN REPLY REFER TO:

SOUTHEAST REGION	
MAR 25 '66	
Regional Director	☒
Assistant Dir. (Adm.)	☐
Assistant Dir. (Inv.)	☐
Assistant Dir. (Plan.)	☐
Assistant Dir. (Spec.)	☐
Assistant Dir. (Tech.)	☐
Chief, Hydrology Div.	☒
Chief, Water Resources Div.	☒
Chief, Water Quality Div.	☐
Chief, Water Use Div.	☐
Chief, Water Policy Div.	☐
Chief, Water Research Div.	☐
Chief, Water Safety Div.	☐
Chief, Water Training Div.	☐
Chief, Water Administration Div.	☐
Chief, Water Conservation Div.	☐
Chief, Water Pollution Div.	☐
Chief, Water Quality Control Div.	☐
Chief, Water Resources Planning Div.	☐
Chief, Water Resources Development Div.	☐
Chief, Water Resources Management Div.	☐
Chief, Water Resources Research Div.	☐
Chief, Water Resources Training Div.	☐
Chief, Water Resources Administration Div.	☐
Chief, Water Resources Conservation Div.	☐
Chief, Water Resources Pollution Div.	☐
Chief, Water Resources Quality Control Div.	☐
Chief, Water Resources Planning Development Div.	☐
Chief, Water Resources Management Research Div.	☐
Chief, Water Resources Training Administration Div.	☐
Chief, Water Resources Conservation Pollution Div.	☐
Chief, Water Resources Quality Control Planning Development Div.	☐
Chief, Water Resources Planning Development Management Research Div.	☐
Chief, Water Resources Training Administration Conservation Pollution Div.	☐
Chief, Water Resources Quality Control Planning Development Management Research Div.	☐
Chief, Water Resources Planning Development Management Research Training Administration Conservation Pollution Div.	☐
Chief, Water Resources Quality Control Planning Development Management Research Training Administration Conservation Pollution Div.	☐

March 22, 1966

Mr. Elbert Cox, Regional Director
Southeast Region
National Park Service
P. O. Box 10008
Richmond, Virginia 23240

Dear Mr. Cox:

This letter summarizes the results of a ground-water study made by the U.S. Geological Survey in the Alabama section of Natchez Trace Parkway in Colbert County, as an aid in locating a water supply adequate for the needs of the proposed park development at the Colbert Ferry and Cherokee Residential and Maintenance areas. The planned water requirements are 25 gpm (gallons per minute) at Cherokee and 75 gpm at Colbert Ferry.

The results of the ground-water study indicate that water of satisfactory chemical quality and quantity is available in the Cherokee area at the site of test well 3 and in the Colbert Ferry area at the site of test wells 5 and 6. The sites of the test wells in the Cherokee and Colbert Ferry areas are shown on the enclosed map.

The Cherokee and Colbert Ferry areas are underlain by the Tuscumbia Limestone and the Fort Payne Chert of Mississippian age. The Tuscumbia Limestone is a light-gray to gray, medium-bedded, hard, dense finely crystalline limestone. It contains light-gray to black chert as nodules and thick bands. It is very fossiliferous; fragments of crinoid stem plates, coral bryozoa, and brachiopods are common at many exposures. The thickness of the Tuscumbia Limestone in the areas of study ranges from 30 feet in test well 6 to 175 feet in test well 1. The Fort Payne Chert is a light-gray to white crystalline hard limestone, which contains large quantities of light-gray to black chert that occurs as thick bands and as nodules disseminated through the limestone. In places it is mottled with dark-green zones composed of glauconite. The thickness of the Fort Payne Chert in the areas of planned development is estimated to be 200 feet. Test drilling did not penetrate the entire thickness of the Fort Payne at either of the two areas.

The Tuscumbia Limestone and the Fort Payne Chert are productive aquifers in Colbert County. Ground water in these formations occurs in solution openings along fractures and bedding planes. A successful well must

Rec'd w/ memo to Dept from Chief. OKW-WSC. May 5, 1969.

penetrate a sufficient number of openings to provide the desired quantity of water. The water-bearing openings in the limestone and chert are generally most numerous and most productive at depths less than 250 feet below land surface.

Water of suitable quality and of sufficient quantity at the Cherokee area can be obtained from a well at the site of test well 3. Test well 3 was drilled to a depth of 208 feet and water-bearing openings were penetrated, which yielded an estimated 15 gpm at 50 to 61 feet and 45 gpm at 186 feet. During a 12-hour pumping test on this well on Aug. 3 and 4, 1965, the drawdown in water level was 14 feet in response to pumping 57 gpm. Hence, the specific capacity was 4 gpm per foot of drawdown. If the well is pumped at the planned rate of 25 gpm, the drawdown will be about 6 feet. The water table at the site of test well 3 is expected to fluctuate seasonally between 15 and 50 feet below land surface. The results of the aquifer test indicate that test well 3 could be pumped at 140 gpm with a drawdown in water level of about 35 feet. This would necessitate a pump setting of about 90 feet.

Two water samples were collected during the pumping test for chemical analysis. The results of these chemical analyses, made by the U.S. Geological Survey laboratory in Baton Rouge, La. and reported in parts per million are given on the attached page.

The results of the analyses indicate that the water is very hard and slightly high in iron content. The iron content is an unusual occurrence in water from limestone aquifers in this area and may decrease with pumping.

Water of suitable quality and of sufficient quantity at the Colbert Ferry area can be obtained from wells at the sites of test wells 5 and 6.

Test well 5 was drilled to a depth of 202 feet and penetrated a water-bearing opening at a depth of 159 feet which yielded an estimated 50 gpm. During a 12-hour pumping test on Aug. 4, 1965, the drawdown in water level was 20 feet, in response to pumping 107 gpm. This indicated a specific capacity of about 5 gpm per foot of drawdown. If the well is pumped at the planned rate of 75 gpm, the drawdown in water level will be about 14 feet. The water table at the site of test well 5 is expected to fluctuate seasonally between 50 and 85 feet below land surface. The results of the aquifer test indicate that test well 5 could be pumped at 150 gpm with a drawdown in water level of about 28 feet. This would necessitate a pump setting of about 120 feet.

Test well 6 was drilled to a depth of 151 feet. A pumping test was run on this well on Aug. 20, 1965. During the 12-hour test the drawdown in water level was about 40 feet in response to pumping 43 gpm. The specific capacity was about 1 gpm per foot of drawdown. The water table at the site of test well 6 is expected to fluctuate between 70 and 95 feet below

land surface. Data obtained from the pumping test indicate that the well should not be pumped in excess of 30 gpm. The drawdown in water level at 30 gpm would be about 30 feet. Necessary pump setting would be about 130 feet.

Two water samples were collected during the pumping test run on wells 5 and 6 for chemical analysis. The results of these analyses are given on the attached page.

If any of the basic data that were collected during the investigation should be needed, please do not hesitate to advise.

Sincerely yours,

For the District Chief
William L. Broadhurst


James W. Board
Hydraulic Engineer

Attachments

TEST WELL 3

*Cherokee*Natchez Trace Parkway, Colbert County, AlabamaChemical Analysis
(parts per million)

	<u>Sample collected after 1.5 hours of pumping</u>	<u>Sample collected after 12 hours of pumping</u>
Silica (SiO ₂)	8.1	7.7
Iron (Fe)	.30	.58
Calcium (Ca)	46	42
Magnesium (Mg)	21	21
Sodium (Na)	7.6	5.5
Potassium (K)	.6	.6
Bicarbonate (HCO ₃)	247	232
Carbonate (CO ₃)	0	0
Sulfate (SO ₄)	.2	1.8
Chloride (Cl)	7.2	5.6
Fluoride (F)	.7	.4
Nitrate (NO ₃)	.1	1.9
Dissolved solids	219	212
Hardness, as CaCO ₃	200	191
Noncarbonate hardness	0	1
Specific conductance (micromhos at 25°C)	399	382
pH	6.9	6.7
Color	5	0
Temperature (°F)	63	63

Other Supporting Information

Form 10-174
(June 1962)UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FACE SHEET FOR COMPLETION REPORT

Park Natchez Trace Parkway	Region Southeast	Work Order No. 225047
Location in Park Cherokee Subdistrict Headquarters, Section 2-C	State(s) Alabama	Fund Symbol 14X1037
☒ Contract and/or ☒ Day Labor	County or Counties Colbert	Year Programmed 1967
Work Order Title 2-C, Cherokee District Headquarters, Maintenance Area Development (Compl.) B-164-1, B-197, U-90-1, U-91-1, M-148-1		PCP No. B-164, B-197 U-90, U-91, R-148 Master Plan No. <i>Atlanta</i>
		Master Plan Corrected By
		As Built Drawings By
		Date Started January 1966
		Date Completed April 1969

DESCRIPTION OF FIXED ASSETS
(For completion by employee in charge of project)TOTAL COSTS
(For completion by FFO)

Completion of Maintenance-Office Building, No. 222,	\$10,083.44
Water System	43,587.52
Sewer System	7,728.51
Grounds General	4,199.66
Chain-link Fence	3,020.99
Accountable Equipment Not Subject to Depreciation	385.00
Total	\$69,005.12
220 General Bldg	10,083.44
230 Utility System	51,316.03
240 Grounds Improvement	7,220.65
262 Equipment Not Subject to Depreciation Funding	385.00

84,876.30

TOTAL

\$ 84,876.30

DISTRIBUTION		THE FIXED ASSET DESCRIBED ABOVE HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED DRAWINGS, SPECIFICATIONS, AND AUTHORIZED CHANGES		
No.	To	Submitted By:	Title:	Date:
1	WASO	<i>Bobby S. Matthews</i>	Civil Engineer	11/6/69
1	WCC	<i>Bobby S. Matthews</i>		
2	SERO	<i>Keith D. Miller</i>	Acting Superintendent	11/6/69
1	NTP FILE	<i>Keith D. Miller</i>		
		COSTS VERIFIED BY	Title:	Date:
		T. J. Baer (Signed)	Regional Accountant	DEC 10 1969

Rec'd by subd. to NPS, Atlanta, Ga. 11/10/69

11340

Form 10-174A
(June 1962)UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Work Order Number

25047

Fund Symbol

14X1037

Year Programmed

1967

COMPOSITION OF COST FOR COMPLETION REPORT

Park	Region
Natchez Trace Parkway	SE
Location in Park	
Cherokee Subdistrict Headquarters, Section 2-C	
Work Order Title	
2-C, Cherokee District Headquarters, Maintenance Area Development (Compl.)	
B-164-1, B-197, U-90-1, U-91-1, M-148-1	

COMPOSITION OF COST

COSTS CHARGED TO FUNDS ALLOTTED TO FIELD FINANCE OFFICE		
(1) Personal Services.....	\$ 5,603.48	
(2) Travel.....	4.50	
(3) Contract Work	51,379.81	
(4) Supplies and Materials.....	3,151.18	
(5) Other Direct Expenses.....	7,294.99	
(6) Operation of Equipment.....	1,186.16	
(7) Depreciation of Equipment.....		
(8) Purchase of Construction Equipment.....	150.00	
(9) Purchase of Other Accountable Equipment	235.00	
(10) Other Costs:		
(11) TOTAL COST CHARGED TO FFO FUNDS	xxxxxxxxxx	\$ 69,005.12
OTHER COSTS:		
(12) PS&S, AP, and/or Facilitating Services @ 23 %.....	\$ 15,871.18	
(13) Inventory and Other Non-Fund Costs		15,871.18
(14) GROSS WORK ORDER COSTS	xxxxxxxxxx	\$ 84,876.30
LESS:		
(15) Residual Value of Construction Equipment on Line 8	\$	
(16) Other Credits		
(17) NET COST OF FIXED ASSETS	xxxxxxxxxx	\$ 84,876.30

Identify other costs and other credits by line item entry, on an attached schedule, or explain in narrative.

CONSTRUCTION PROJECT
COMPLETION REPORT
ASSET DESCRIPTION DATA SHEET

PARK Natchez Trace Parkway CONTRACT NO. 14-10-1-604-211 Day Labor and

ROADS & PARKWAYSPrimary ☐Secondary ☐

Type Surface _____ Length _____ Width _____

Route Number _____ Origin _____ Terminus _____

Cost _____

TRAILS

Surface _____ Length _____ Width _____

Name or Number _____

Cost _____

BUILDINGSType Building Maintenance-Office Building Number 222
Visitor Center, Utility, etc.Construction Materials Reinforced concrete floor, brick and block walls, andNo. of Rooms 8 built-up roof Sq. Ft. 6420 Heating Oil fired furnace with
forced hot waterType Air Cond. _____ Central _____ Other Uses Rest RoomCost \$10,083.44 + \$235.00 Accountable Equipment Rest Room, MuseumSTRUCTURESKind of Structure _____
Flagpole, Overlook

Detailed Description _____

Cost _____

UTILITIESWATER SYSTEMDetailed Description of System & Components 72 ft.- 1" G.S. pipe, 3205 ft.- 2"
PVC pipe, 373 ft.- 2 1/2" G.S. pipe, 810 ft.- 6" A.C. pipe, 17 water line markers,
2- 1" gate valves, 1- 2" gate valve, 1 valve box with 2" gate valve and 2" pres-
sure reducing valve, 3 fire hydrants, 1 water well, 1- 15,000 gal. elevated water
tank, 1 fire pumphouse (200 sq. ft.), and 1 electric motor-driven booster fire
pump.Cost \$43,587.52

NARRATIVE TO ACCOMPANY PROJECT COMPLETION REPORT
COMPLETION OF MAINTENANCE BUILDING, GROUNDS WORK,
AND UTILITY SYSTEM
CHEROKEE SUBDISTRICT HEADQUARTERS
SECTION 2-C
NATCHEZ TRACE PARKWAY
WORK ORDER NO. 225047

GENERAL:

This work consisted of the completion of the Maintenance-Office Building, No. 222, and the construction of the fire pumphouse, water distribution system, water tank, water well, sewer system, and grounds work at the Cherokee Subdistrict Headquarters. The Maintenance-Office Building was completed by day labor. The water and sewerage systems were constructed under a contract; B. H. Craig Construction Company, Contractor.

After receiving plans and specifications from the Philadelphia Service Center, the Natchez Trace Parkway issued invitations for bids on February 21, 1967. Three bids were received and the bid opening was held on March 14, 1967. B. H. Craig Construction Company, Florence, Alabama, was the low bidder and was awarded Prime Contract No. 14-10-1-604-211 on March 23, 1967, in the amount of \$52,670.53 (Total B Bid: Items 1-11, 14, and 15-21).

A preconstruction conference was held on March 30, 1967, at 10:30 a.m. at the Cherokee Maintenance Area, Cherokee, Alabama. Those attending and their respective organization were:

B. H. Craig Construction Co., Inc.

H. Ray Koonce, Project Manager

Natchez Trace Parkway

Glenn C. Farrar, Supervisory Civil Engineer
Donald R. Sarver, Administrative Officer
Marcelle Mann, Maintenance & Construction Representative
William D. Turner, Jr., General Supply Specialist
Hubert P. Thompson, Maintenance man
Garnet B. Sutphin, Foreman III

Notice to Proceed was signed by Mr. B. H. Craig, Jr., President, B. H. Craig Construction Co., Inc., on April 3, 1967.

Notice of Beginning Date was issued by Mr. Donald R. Sarver, Acting Contracting Officer, on April 5, 1967, establishing April 4, 1967, as the first

calendar day of the contract period. The contract period would expire on July 2, 1967, for Bid Items 1-11, and 15-21, and on October 20, 1967, for Bid Item 14.

After issuing Stop Orders Nos. 1 and 2, and granting time extensions because of the late shipment of the 2" PVC pipe, 6" A.C. pipe and the fire hydrants, the final completion date for Bid Items 1-11 and 15-21 was July 28, 1967.

After issuing Stop Order No. 3 and granting time extensions because of the late arrival of the water tank, the final completion date for Bid Item No. 14 became November 16, 1967.

A final inspection was made on Bid Items 1-11 and 15-21 on July 31, 1967. The Letter of Acceptance for Bid Items 1-11 and 15-21 was written on August 10, 1967. The final inspection for Bid Item No. 14 was made on November 27, 1967, and the Letter of Acceptance was written on November 28, 1967.

Subcontractors for Contract No. 14-10-1-604-211 were as follows:

- | | | |
|---------------|---|---|
| 1. Water Tank | - | W. E. Caldwell Company
Louisville, Kentucky |
| 2. Electrical | - | Williams Electric Company
Sheffield, Alabama |
| 3. Plumbing | - | Edward Briggs Plumbing Company
Florence, Alabama |
| 4. Masonry | - | George Matthews
Sheffield, Alabama |
| 5. Roofing | - | Lookout Roofing & Heating Company
Tuscumbia, Alabama |

WATER WELL:

The water well was drilled by Miller Drilling Company, Lawrenceburg, Tennessee, during 1966.F.Y. under Contract No. 14-10-0127-1733. Funds were provided by the WSC out of 1965 F.Y. Water Resources Funds. The WSC was reimbursed out of funds provided under this Work Order (No. 225047). The cost for the water well is included under this Work Order. For complete details of the work performed on the water well, see the Completion Report on the wells drilled under Contract No. 14-10-0127-1733.

WATER PUMP:

The water pump was manufactured by Reda Pump Company, Bartlesville, Oklahoma, and is a Sub-urban Model No. 14D18P151, 1½ H.P., single phase, 220 volt pump, capable of pumping 20 G.P.M. at 190 ft. total head. The pump was installed by Martin Supply Co., Inc., Sheffield, Alabama, under Purchase Order No. 604-512, dated February 20, 1967. The pump was set between 60 and 70 feet below the ground surface.

WATER DISTRIBUTION SYSTEM:

The water distribution system was installed in accordance with Drawing No. PKY-NT 3391. The system was installed by Edward Briggs Plumbing Company, Florence, Alabama, Subcontractor.

The water distribution system consists of 72 ft.- 1" G.S. water pipe, 3205 ft.- 2" PVC water pipe, 310 ft.- 6" A.C. water pipe, 373 ft.- 2½" G.S. drain pipe, 17 water line markers, 2- 1" gate valve and box, 1- 2" gate valve and box, 1 valve box with 2" gate valve and 2" pressure reducing valve, and 3- 6" fire hydrants with 6" gate valve and box.

Entire system was disinfected and pressure tested in accordance with the specifications.

WATER TANK:

The water tank was constructed by W. E. Caldwell Company, Louisville, Kentucky, in accordance with Drawing No. PKY-NT 3391. The water tank is a 15,000 gallon Pedosphere and is 50'-1½" high from top of concrete base to bottom of water tank. Depth of the water is 15 ft. from bottom of tank to overflow pipe. A 2" Clayton altitude valve, Type 206-4M, was installed on the 2" fill line from the water well to the water tank.

The tank was disinfected in accordance with the specifications.

FIRE PUMPHOUSE AND FIRE PUMP:

The fire pumphouse, Building No. 224, was constructed in accordance with Drawing No. PKY-NT 3391 and contains 208 sq. ft. All woodwork on the fire pumphouse was painted with Sherwin-Williams warm gray, BL-7, exterior stain.

A fire pump was installed in the fire pumphouse. The fire pump is a Centrifugal Fairbanks Morse 3" - 5874A pump on a 213 T frame, horizontal motor, 5 H.P., single phase, 60 cycle, 230 volt, 1800 RPM, capable of pumping 220 G.P.M. at 65 ft. total dynamic head.

SEWERAGE SYSTEM:

The sewerage system, constructed in accordance with Drawing No. HCY-NT 3391, was designed to handle waste from the Maintenance-Office Building and four residences that were proposed to be built at the Cherokee Sub-district Headquarters.

The sewerage system consists of 640 ft.- 6" C.I. sewer pipe, 6- 4' diameter manholes, 1- 3500 gallon concrete septic tank, and 1 seepage bed (24' x 52'). Edward Briggs Plumbing Company constructed the sewerage system.

MAINTENANCE-OFFICE BUILDING COMPLETION:

The Maintenance-Office Building was constructed under Work Order No. 225029, but because of a shortage of funds some of the fixed equipment was left out of the building. Funds were provided under this Work Order (No. 225047) to complete the Maintenance-Office Building by day labor.

Items and equipment installed under this Work Order out of the day labor portion of this account are as follows:

<u>Item</u>	<u>Description and Installation</u>
Steel Lockers	Purchased from Federal Prison Industries, Inc., Washington, D.C., and installed by NPS personnel.
Fire Extinguishers	Purchased from The Ansul Company, 1 Stanton St., Morinette, Wisconsin, and installed by NPS personnel.
Wash Area Well	Installed by Grisham & Guthrie, Cherokee, Alabama, under Purchase Order No. 604-593 dated March 23, 1967.
Air Conditioner	Two (2) ton International compressor-condenser unit, Model RCQ2D1 with a Model UCQ2D coil. Purchased and installed by Young-Pittman Co., Inc., 600 South Court St., Florence, Alabama, under Purchase Order No. 604-508 dated February 13, 1967.
Air Compressor	Devilbiss Model UAL-5040, 1 H.P., 230 volt, 60 cycle, single phase, with 60 gal. ASME Air Receiver. Purchased from The Devilbiss Company, P.O. Box 913, Toledo, Ohio, under Purchase Order No. 604-505 dated February 10, 1967, and installed by NPS personnel.

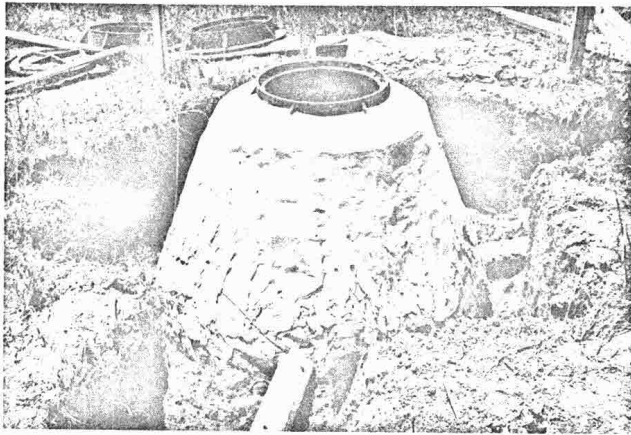
Gasoline Storage Tanks	2- 1,000 gallon tanks purchased from Birmingham Tank Company, P.O. Box 1490, Birmingham, Alabama, under Purchase Order No. 604-499 dated February 1, 1967, and installed by NPS personnel.
Gasoline Pumps	2 Tokheim gasoline pumps, Model 286-SC purchased from B. M. Ingram Oil Co., Inc., 705 So. Seminary St., Florence, Alabama, under Purchase Order No. 604-594 dated March 23, 1967, and installed by NPS personnel.
Air Hose & Reel	Retractable air hose and reel, Balcrank Model No. 3362 purchased from Balcrank Lubrication Equip. Div., The Wheelabrator Corp., Mishawaka, Indiana, under Purchase Order No. 604-506 dated February 10, 1967, and installed by NPS personnel.
Water Hose & Reel	Retractable water hose and reel, Balcrank Model No. 3364 purchased from Balcrank Lubrication Equip. Div., The Wheelabrator Corp., Mishawaka, Indiana, under Purchase Order No. 604-506 dated February 10, 1967, and installed by NPS personnel.
Battery Charger (Accountable Equipment)	Belkamp battery charger, Stock No. 4-4096, purchased from Automotive Parts Co., Florence, Alabama, under Purchase Order No. 604-933 dated June 30, 1967.
Floor Jack (Accountable Equipment)	1½ ton Fleet Floor Jack, Stock No. 5-26, purchased from Automotive Parts Co., Florence, Alabama, under Purchase Order No. 604-933 dated June 30, 1967.
Twin Post Lift	EC103 Weaver Twin Post Lift, capacity 16,000 lbs., purchased from Harwell Distributing Corporation, 133-135 West Bankhead, New Albany, Mississippi, under Purchase Order No. 604-435, dated January 9, 1967, and installed by NPS personnel.
Motor & Control	EC-60 power unit and WM-37, 7½ H.P. motor for Twin Post Lift, purchased from Harwell Distributing Corp., 133-135 West Bankhead, New Albany, Mississippi, under Purchase Order No. 604-504, dated February 9, 1967, and installed by NPS personnel.

GROUNDS GENERAL:

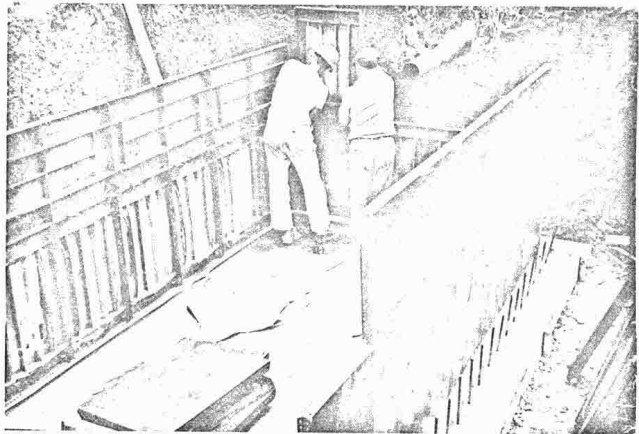
All grounds work was completed under the day labor portion of the project. Approximately 120 plants of various species were planted around the Cherokee Maintenance Area by Mid-South Nursery, 1323 East Main St., Tupelo, Mississippi. The planters around the Maintenance-Office Building were prepared by NPS personnel.

FENCE:

Approximately 862 ft. of 6 ft. high galvanized steel chain-link fence was installed under Contract No. 14-10-1-604-211.



SANITARY MANHOLE UNDER CONSTRUCTION
CHEROKEE SUBDISTRICT HEADQUARTERS
SECTION 2-C
NATCHEZ TRACE PARKWAY

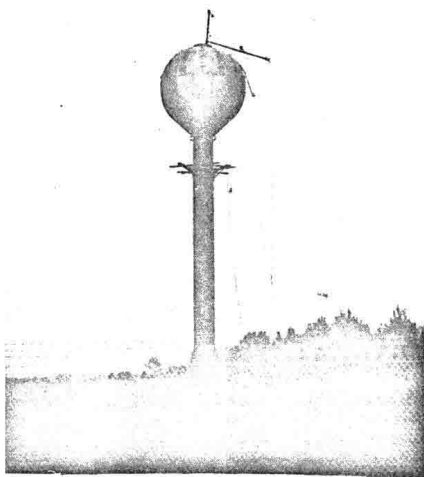


3500 GALLON SEPTIC TANK UNDER CONSTRUCTION
CHEROKEE SUBDISTRICT HEADQUARTERS
SECTION 2-C
NATCHEZ TRACE PARKWAY

PHOTOGRAPHS TO ACCOMPANY PROJECT COMPLETION REPORT

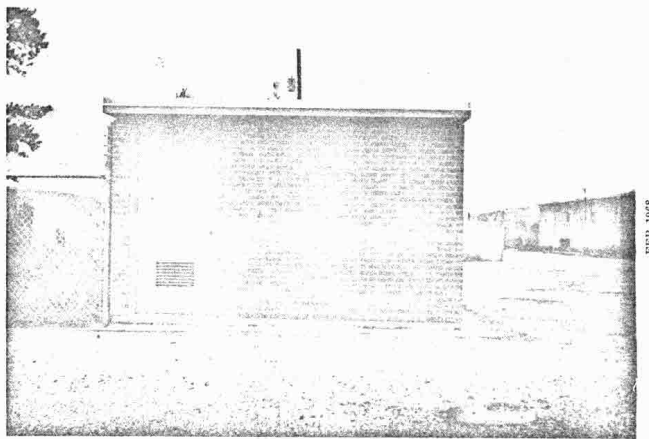


SITE FOR 15,000 GALLON WATER TANK BEFORE CONSTRUCTION
CHEROKEE SUBDISTRICT HEADQUARTERS, SECTION 2-C
NATCHEZ TRACE PARKWAY

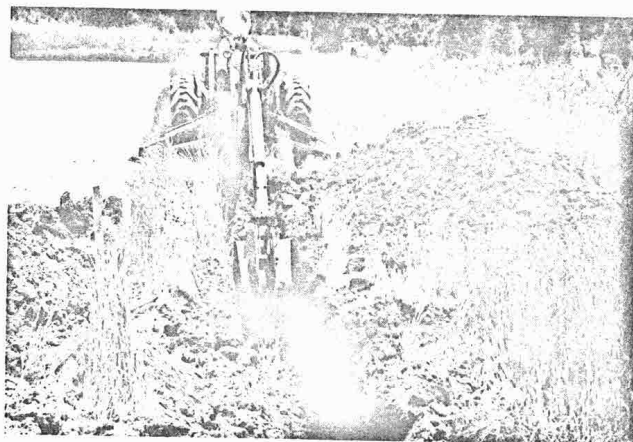


15,000 GALLON WATER TANK UNDER CONSTR.
CHEROKEE SUBDISTRICT HDQTRS., SECTION 2-C
NATCHEZ TRACE PARKWAY

PHOTOGRAPHS TO ACCOMPANY PROJECT COMPLETION REPORT

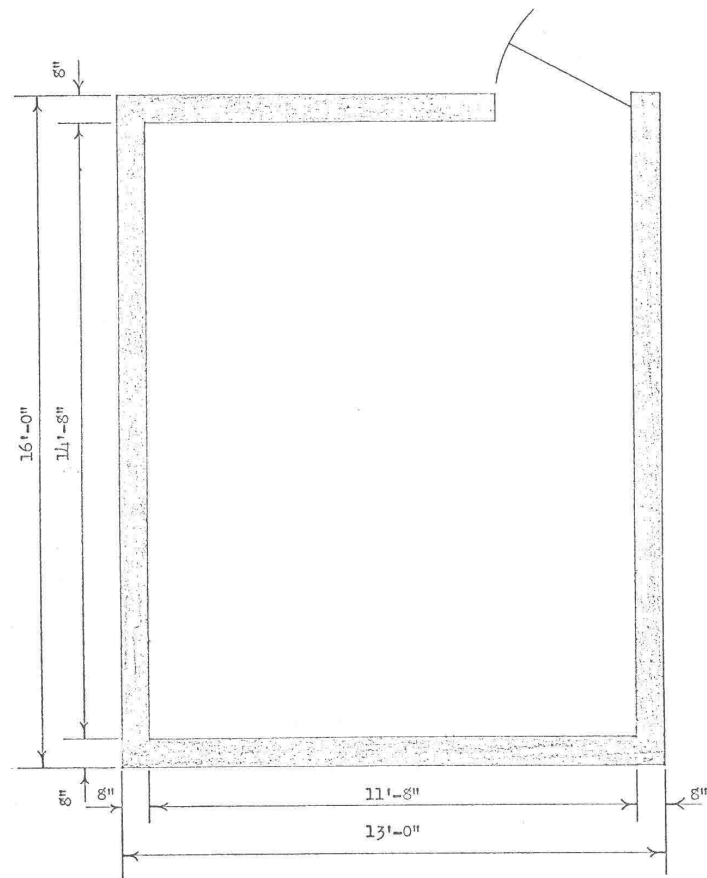


COMPLETED FIRE PUMPHOUSE
CHEROKEE SUBDISTRICT HEADQUARTERS
SECTION 2-C
NATCHEZ TRACE PARKWAY



TRENCH FOR 6" & 2" WATER LINE TO WATER TANK
CHEROKEE SUBDISTRICT HEADQUARTERS
SECTION 2-C
NATCHEZ TRACE PARKWAY

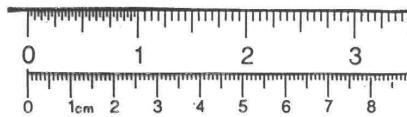
PHOTOGRAPHS TO ACCOMPANY PROJECT COMPLETION REPORT

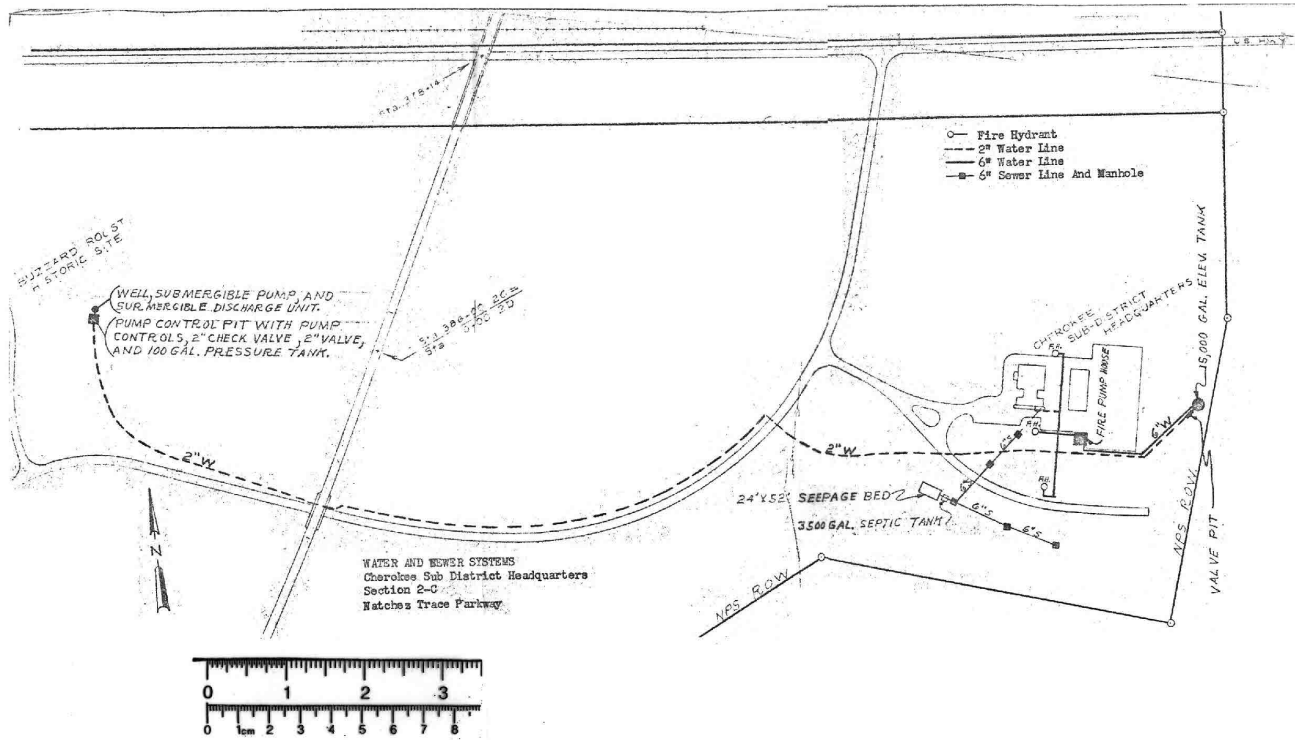


FIRE PUMP HOUSE
CHEROKEE SUB DISTRICT HEADQUARTERS
NATCHEZ TRACE PARKWAY

Date Drawn: Feb. 29, 1968

Scale: $\frac{3}{8}" = 1'-0"$





L54 SKR(OLW)

MAR 30 1965

S
S L W
[Signature]

Mr. Harry D. Wilson, Jr.
Division Hydrologist
Mid-Continent Area
U. S. Geological Survey
Room 1252 Federal Building
1520 Market Street
St. Louis, Missouri 63103

Dear Mr. Wilson:

District Geologist Powell called Mr. Vick on March 23 to advise that he had found it desirable to conduct the requested water resources investigation at the Colbert Ferry development, Natchez Trace Parkway, while presently engaged in the field study at the proposed Cherokee developed area. This is most agreeable to the Park Service as we are extremely interested in completing both studies as soon as possible. The technical information obtained from the Survey's preliminary reports will be helpful to us in the preparation of test well drilling specifications and the design of the proposed water systems.

The overall scope of the new project would be similar to that of the Cherokee project which is now underway. This study would generally consist of the following elements:

1. An appraisal of the geologic and topographic factors which influence the occurrence of ground water in the Colbert Ferry area.
2. Electric logging of test holes.
3. Conduct chemical analyses of water samples collected from test wells.
4. General field supervision of test well drilling.
5. Evaluation of field data collected during the pump testing phase of the project.
6. Preparation of an administrative report.

The estimated cost of the work as outlined above would be approximately \$1,500.

We are pleased to advise you that funds in the amount of \$1,500 are available to cover the costs of the USGS participation in this water resources project. The billing of all expenses for reimbursement to your appropriation should be handled directly with Superintendent Malcolm E. Gardner, P. O. Box 948, Tupelo, Mississippi 38802.

Any report prepared by the USGS containing geologic and hydrologic data collected during the water resources study which you believe should be released to the open file must first be submitted to the Park Service for review. After proper review by the Park Service, release of the report will be granted if it is determined such release is not detrimental to the Government's interest.

We greatly appreciate your cooperation on this matter.

Sincerely yours,

SIGNED

Raymond O. Mulvany
Acting Regional Director

cc: ~~Director~~
Supt., Natchez Trace
Mr. William J. Powell, USGS

94-2-12-65-

LS4 SER (OLW)

FEB 9 - 1965

Mr. William L. Broadhurst
District Chief
Water Resources Division
P. O. Box V
University, Alabama 35486

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Dear Mr. Broadhurst:

We request professional assistance at Natchez Trace Parkway pursuant to the discussion between Mr. William Powell and Messrs. Farrar and Vick of the National Park Service on February 4 in Tuscaloosa, Alabama.

It is our desire that the U. S. Geological Survey undertake for us a water resources investigation at the proposed Cherokee District Development to be located approximately two miles west of the town of Cherokee, Alabama. The purpose of this study is to determine if an adequate water source can be developed in the study area which would be sufficient to meet the present and future water demands of the Parkway developed area. In the discussion with Mr. Powell, it was mutually agreed that the investigation should consist essentially of the following elements:

1. An appraisal of the geologic and topographic factors that influence the occurrence of ground water. Using the geologic data on hand, the project geologist would prepare an administrative letter including information concerning geologic formations, movement of water, quality of water and a priority order for the drilling of test wells in the Cherokee study area.
2. Make the necessary arrangements for providing an electric logger during the drilling operation.
3. Determination of chemical quality of existing ground-water supplies.
4. Field supervision of test well drilling.
5. Evaluation and analyses of field data collected during the pump testing phase of the project.

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6. After completion of the well drilling work, the project geologist will prepare an administrative report summarizing the results of the drilling including lithologic log of soil samples and pump testing results plotted on drawdown curve.
7. ^{Parshall} Installation of partial flume on Buzzard Roost Spring to determine flow variations.

Mr. Powell informed Mr. Vick last week that the Survey would be pleased to conduct this investigation for the Park Service at this time. The estimated cost of the work as outlined above would be approximately \$1,500.

Funds in the amount of \$1,500 are available to cover the costs of the USGS participation in this water resources project. The billing of all expenses for reimbursement to your appropriation should be handled directly with Superintendent Malcolm E. Gardner, P. O. Box 948, Tupelo, Mississippi 38802.

Any report prepared by the USGS containing geologic and hydrologic data collected during the water resources investigation which you believe should be released to the open file must first be submitted to the Park Service for review. After proper review by the Park Service, release of the report will be granted if it is determined such release is not detrimental to the Government's interests.

After completing the Cherokee project, we would like the Survey to conduct a similar investigation this spring at the proposed Colbert Ferry Development to be located near the Tennessee River in Colbert County, Alabama. A formal request regarding this particular project will be made at a later date.

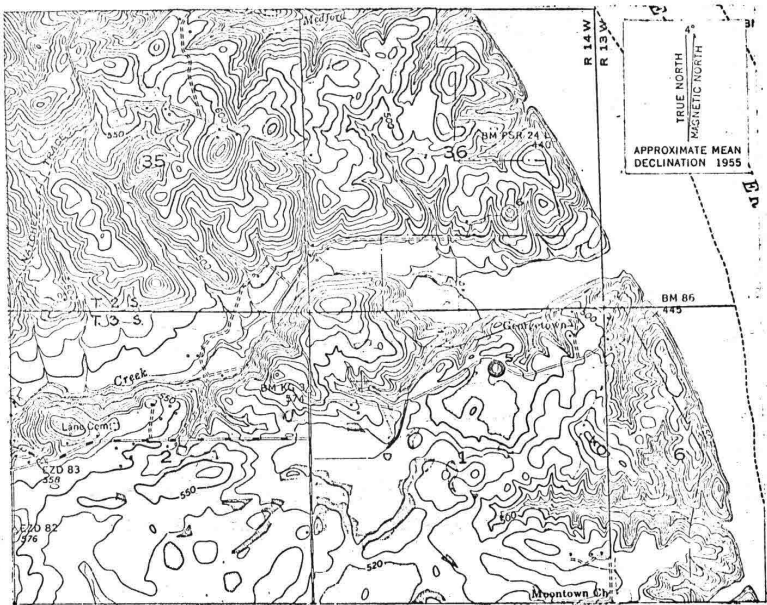
We greatly appreciate the excellent cooperation and technical assistance received from Messrs. Powell and Wiley of your staff on this water resources matter.

Sincerely yours,

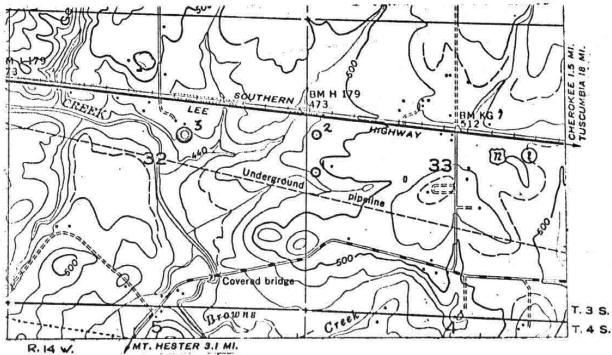
(SIGNED)

E. M. ~~McGhee~~
Acting Regional Director

cc:
✓ Director
Chief, EODC (2)
Supt., Natchez Trace



Colbert Ferry Area



Cherokee Residential and Maintenance Area

EXPLANATION

- o¹
TEST WELL AND NUMBER
- o³
TEST WELL PLANNED FOR CONSTRUCTION
OF WATER SUPPLY WELL

LOCATIONS OF TEST HOLES, NATCHEZ TRACE PARKWAY,
COLBERT COUNTY, ALABAMA

Docket Information

Number of Documents in Docket 23
Documents Dated from 2/9/1965 to 11/6/1969
Docket Compiled: 5/27/2011